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It has been a recurring concern in the field that the sample sizes of prepubertal and peripubertal bipolar research studies are higher than would be anticipated based on population rate of juvenile mania. Overall, we give kudos to the authors of this text for selecting mainly plausibly-sized studies throughout, although we were concerned that the “Bipolar Neuroscience” chapter references a number of potentially questionable articles in terms of the number of cases of prepubertal children presenting with mania.<sup>4,5</sup> Finally, the organization of 3 chapters dedicated to diagnosis of all variations of mood disorders (versus chapters dedicated to distinct disorders) was redundant, and it was confusing to see a brief overview of treatment in the diagnosis section of the book.

Despite the above-mentioned problems, Singh’s text is an exceptional synopsis of pediatric mood disorders that provides readers more practical tools and evidence-based knowledge than simply reading the mood disorder section of a child psychiatry text. The text weaves expert treatment and diagnostic insights with the neuroscience underlying mood disorders and practical resources. We recommend this book for child and adolescent mental health providers, regardless of level of clinical background, who are looking for a solid foundation in pediatric mood disorders. Given that mood disorders affect 3.8% of the pediatric population and that mood disorders are commonly misdiagnosed, this is a “must read” for child and adolescent mental health clinicians looking for anchoring expertise.

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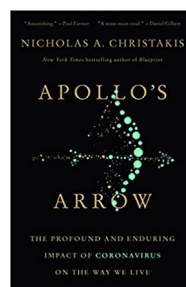
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## Apollo's Arrow: The Profound and Enduring Impact of Coronavirus on the Way We Live

By Nicholas A. Christakis. New York: Little, Brown Spark/Hachette Book Group; 2020.

**S**hould one read about a hurricane at the moment the eye is passing over head? Asked to review *Apollo's Arrow: The Profound and Enduring Impact of Coronavirus on the Way We Live* by Nicholas Christakis during this pandemic, my answer was obviously and rewardingly “yes.” First a bit of nomenclature: the name of the virus causing this pandemic is severe acute respiratory syndrome coronavirus 2 or SARS-CoV-2. The condition SARS-CoV-2 causes is 2019 novel coronavirus disease (COVID-19).

In 1983, I stepped into San Francisco General Hospital as a rotating intern at an epicenter of the human immunodeficiency virus/acquired immunodeficiency syndrome pandemic. The maelstrom of evolving science, politics, fear, hatred, compassion, and courage became the fulcrum riding on the backs of the ill and their caregivers. The experience shaped me and all my colleagues. We continuously vacillated between disconnected moments of analysis and fully engaged periods of fear, empathy, and exhaustion. Many of my memories and emotions from those years reverberate now.

For the past 12 years I have served as a consultant to the Oregon Health Authority and Department of Human Services Child Welfare in addition to my position as Division Head of Child Psychiatry at Oregon Health & Science University. Oregon's first diagnosed case of COVID-19 occurred in early February 2020. In March 2020, the head of the Senior Health Advisor (SHA) team consulting to the chief public health officer and our governor asked if I would join her team as a Subject Matter Expert. As a SHA for a 6-month stretch, my job was to absorb evolving knowledge related to the pandemic and apply this to our behavioral health care continuum and child welfare response. Daily literature reviews and debates occurred within our group of epidemiologists, a wide range of other physicians, zoologists (veterinarian), and environmental health experts, with presentations by others, including a

physicist with expertise in aerosols and mathematical algorithms of risk analysis and mitigation.

These discussions and debates led to hundreds of guidance documents, shaping advice and mandates for the state's COVID-19 response. There were myriad questions for a child psychiatrist: telehealth works for many, but what about inequitable access to technology and the subtle failure of meaningful connections on telehealth platforms? How do we determine if we should see someone in person or via telehealth from a risk/benefit perspective? How do we address the social determinants of health right away before completing a full mental health assessment? How do we balance the risk of infection with the need for connection, particularly when loved ones are at risk or living in congregate care settings? How do we safely reunite children in foster care with their biological families? Do face shields alone work? (Briefly: No.) How do we make sense of escalating domestic violence and plummeting child abuse reports? What are the psychological, economic, and educational ramifications of closing schools versus the risk of escalating community infections? Do we need to choose between bars, restaurants, and gyms versus schools opening? My training as a physician allowed a seamless entry as a colleague, while my expertise in child psychiatry brought unique and necessary perspective. At times, I channeled the role of the mathematician in *Jurassic Park* raising questions about the psychosocial permutations of our options. At other times, I felt more like Columbo, scratching my head and trying to understand complex possibilities without offense. Overall, I was welcomed and fully integrated in the team.

Dr. Anthony Fauci is the embodiment of the public health official and—in my mind and perhaps yours—a heroic figure. Fauci is a seeker of true north in a buffeting gale of evolving information and suffering. I saw these same qualities in the SHA team and our chief public health officer, dedicated county public health officials, our state government employees in the Incident Management Team, the heads of all the agencies that impact children's health, and, so importantly, our Governor. Thus, I must share with you that *Apollo's Arrow* is a downright Faucian text, one that aligns perfectly with the experience at the center of the pandemic response and a text apt to help readers through myriad personal and professional decisions as well as those one must make a citizen.

Christakis is an expert in epidemiology and social sciences, and he practiced as a hospice physician for many years. His work at the Yale Human Nature Lab examines the influence of health and health behaviors on personal social networks. At the time he wrote this learned, compelling, and readable book in August 2020, there were no published data on SARS-CoV-2 vaccine trial outcomes. We had flattened the curve in some parts of the United States where public health measures were in

place, but rates were rising in the Midwest. Personal protective equipment supplies and testing remained inadequate, and there was no meaningful nationally coordinated effort. Christakis writes in his preface, “Despite the advances we have made in medicine, sanitation, communication, technology and science, this pandemic is nearly as ruinous as any in the past century” [p xiii]. With the book, Christakis explains, he wishes to “help our society cope with the threat before us” [p xv]. I do not believe that he foresaw how quickly we would have vaccines and he imagined we were in for a multiyear battle. At times, I felt I was reading a good mystery novel (wondering, “how is this going to end?”), even though I had personally traveled the current pandemic journey in real time. At other times, I experienced the author as straying, offering interesting details disconnected from the theme at hand. I would have appreciated a section that reviewed risk mitigation strategies in a focused way given the goal of helping us to succeed (eg, the behavior of aerosols, ventilation, more information about masks, time of exposure, distancing, testing). It is hard to let go of the role of SHA, as my family, friends, and colleagues may tell you.

Christakis begins with the start of SARS-CoV-2. He details how SARS-CoV-2 is different from past pandemics, particularly in terms of asymptomatic transmission, and compares the ratio of severity of illness with transmissibility of pandemics from 1918 to the present. In a chapter entitled “Grief, Fear and Lies,” he emphasizes biological and social factors that marked past and present pandemics to help the reader understand what we are confronting. His history as a hospice physician imbues his novel-like prose with compassion and recognition of the suffering that accompanies the complexities of ancient and modern plagues. He unflinchingly incorporates the influence of failed political leadership in today's pandemic as well as historical pandemics as part of the analysis of why outcomes are so diverse across time and place. “In fact, one of the great travesties of the COVID-19 pandemic in the United States has been the undermining and muzzling of the widely respected CDC” [p 153]. The book includes many brief individual stories and specific community experiences to bring humanity to the narrative. This work would have helped my onboarding as a SHA and certainly will help anyone who is compelled to work in such a space in the future. In a chapter entitled “An Old Enemy Returns,” Christakis reviews viral behavior, including jumps from animals to humans, and basic epidemiological terms. Later in the chapter “Pulling Apart,” he reviews the relationship of infectivity rates and herd immunity necessary to stop a pandemic. Armed with this knowledge, it easy to consider vaccine hesitancy and antipathy in clear terms.

At the time of this writing (December 14, 2020), the Pfizer/BioNTech vaccines were just administered to health care workers across the United States, and the Moderna

vaccine looks close to authorization, an extraordinary scientific triumph. The Electoral College confirmed the election of Joseph Biden, and Charlie Pride died of complications secondary to COVID-19 after attending the Country Music Awards, an event where masks were sparsely used.<sup>1</sup>

When you read this review in March or April 2021, you will know much more about whether a new federal administration successfully implements a rational, comprehensive, science-based strategy for a country left in chaos and conflict by the prior administration. You will know much more about the rollout of vaccines and their safety and whether the United States remains lethally fractured or limping toward unity in the face of this common enemy. Will this book remain relevant? I imagine it will be. It is a rich vocabulary lesson, crash course in epidemiology, and a text apt to inspire.

My beginning experiences at San Francisco General often remind me that we adolescent and child psychiatrists are physicians first. We understand the awesome power of our bodies to heal and what happens when our foes are too great. Our foundation places us in a unique position to integrate understanding of pandemics and the complex psychosocial permutations of our efforts to tame the disease—all this while compassionately attending to the ubiquitous importance of attachment, resilience, and the social determinants of health. Overall, any pandemic is an epic story, and *Apollo's Arrow* reads like a foreshortened epic: one without closure but with the optimism of a

scientist suggesting a path forward. As Christakis notes: “By connecting volunteering and learning we can affirmatively work together to outlast the predations and limit the damage of such a tiny thing” [p 246].

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